



STIC Search Report

EIC 2100

STIC Database Tracking Number: 143518

TO: Michael B Holmes
Location: RND 5A49
Art Unit : 2121
Monday, February 07, 2005

Case Serial Number: 09/995739

From: David Holloway
Location: EIC 2100
RND 4B19
Phone: 2-3528

david.holloway@uspto.gov

Search Notes

Dear Examiner Holmes,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David

Sèt	Items	Description
S1	33	AU=(REDMOND A? OR REDMOND, A?)
S2	16	AU=(MANGAN M? OR MANGAN, M?)
S3	2	S1 AND S2
S4	1	(S1 OR S2) AND IC=G06F-007?
S5	2	S3 OR S4

File 344:Chinese Patents Abs Aug 1985-2004/May
(c) 2004 European Patent Office

File 347:JAPIO Nov 1976-2004/Sep(Updated 050204)
(c) 2005 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2005/Jan W05
(c) 2005 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20050203,UT=20050127
(c) 2005 WIPO/Univentio

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200508
(c) 2005 Thomson Derwent

5/5/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2005 European Patent Office. All rts. reserv.

01440875

Tracking of data relating to computer based training courses
Verfolgen von Daten bezüglich computergestutzte Lehrgangen
Suivi de donnees relatives a des cours d'apprentissage sur ordinateur
PATENT ASSIGNEE:

CBT (TECHNOLOGY) LIMITED, (1983080), Stephen Court, St Stephens Green,
Dublin 2, (IE), (Applicant designated States: all)

INVENTOR:

Redmond, Anthony , 9 Sandyford Hall Grove, Sandyford, Dublin 18, (IE)
Mangan, Martin , 7 Hampton Court, Bloomfield Avenue, Donnybrook, Dublin
4, (IE)

LEGAL REPRESENTATIVE:

Weldon, Michael James et al (72443), c/o John A. O'Brien & Associates,
Third Floor, Duncairn House, 14 Carysfort Avenue, Blackrock, Co. Dublin
, (IE)

PATENT (CC, No, Kind, Date): EP 1229470 A2 020807 (Basic)

APPLICATION (CC, No, Date): EP 2001650143 011123;

PRIORITY (CC, No, Date): IE 20000973 001130

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/60

ABSTRACT EP 1229470 A2

A tracking system (1) updates data to, and retrieves data from,
learning management databases (10). Update data is received from course
player servers (4), and requests are received from client systems. A
common interface (21) interfaces with all players and clients, and it
polls translation modules (22) for an appropriate and available module
when a message is received. A tracking engine (20) manages threads and a
queue for both synchronous and asynchronous communication. The queue is
linked with database interfaces (24), which are Schema Access Objects
(SAOs). Each SAO is pooled as a set of instances, activated and managed
by a pooling manager.

ABSTRACT WORD COUNT: 104

NOTE:

Figure number on first page: 2

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 020807 A2 Published application without search report

Priority: 030122 A2 Priority information changed: 20021204

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200232	826
SPEC A	(English)	200232	2597
Total word count - document A			3423
Total word count - document B			0
Total word count - documents A + B			3423

5/5/2 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014755164 **Image available**

WPI Acc No: 2002-575868/200262

XRPX Acc No: N02-456554

Tracking of computer-based training courses to monitor progress of
courses using common interface to interface to all players and to poll
routing of messages

Patent Assignee: CBT TECHNOLOGY LTD (CBTT-N); MANGAN M (MANG-I); REDMOND A
(REDM-I)

Inventor: MANGAN M ; REDMOND A

Number of Countries: 028 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 200195149	A	20020606	AU 200195149	A	20011129	200262 B
US 20020095401	A1	20020718	US 2001995739	A	20011129	200262
EP 1229470	A2	20020807	EP 2001650143	A	20011123	200262
IE 82408	B3	20020807	IE 20011031	A	20011129	200262

Priority Applications (No Type Date): IE 2000973 A 20001130

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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AU 200195149	A		22	G06F-017/40	
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US 20020095401	A1			G06F-007/00	
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EP 1229470	A2 E			G06F-017/60	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

IE 82408	B3			G06F-013/00	
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Abstract (Basic): AU 200195149 A

NOVELTY - A common interface (21) communicates with all players and routes signals to a chosen translator (22), while a tracking engine (20) manages threads between the translators and the database interfaces (24) by performing queuing to provide effective buffering between the players (4) and the database interfaces. These interfaces are schema access objects and the systems pools the objects to create a number of instances that can be reused for each request.

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for a computer program product with code.

USE - Tracking progress of computer-based training courses.

ADVANTAGE - Efficient and versatile tracking of courses.

DESCRIPTION OF DRAWING(S) - The drawing shows the system

Common interface (21)

Translators (22)

Tracking engine (20)

Database interfaces (24)

Players (4)

pp; 22 DwgNo 2/2

Title Terms: TRACK; COMPUTER; BASED; TRAINING; COURSE; MONITOR; PROGRESS;

COURSE; COMMON; INTERFACE; INTERFACE; PLAY; POLL; ROUTE; MESSAGE

Derwent Class: P85; T01; W04

International Patent Class (Main): G06F-007/00 ; G06F-013/00; G06F-017/40; G06F-017/60

International Patent Class (Additional): G06F-017/30; G09B-019/00

File Segment: EPI; EngPI

Set	Items	Description
S1	241	AU=(MANGAN M? OR MANGAN, M?)
S2	142	AU=(REDMOND A? OR REDMOND, A?)
S3	0	S1 AND S2
S4	91	(S1 OR S2) AND (TRACK? OR MONITOR? OR LOG OR LOGS OR LOGGI- NG OR RECORD? OR MANAGE? OR CONTROL?)
S5	34	S4 AND (COURSE? OR SCHOOL? OR CLASS OR CLASSES OR TEACH? OR LEARN? OR STUDENT? OR STUDY? OR STUDIES? OR LESSON?)
S6	27	RD (unique items)
S7	20	S6 NOT PY>2000
File	2:INSPEC 1969-2005/Jan W5	(c) 2005 Institution of Electrical Engineers
File	4:INSPEC 1983-2005/Jan W5	(c) 2005 Institution of Electrical Engineers
File	6:NTIS 1964-2005/Jan W5	(c) 2005 NTIS, Intl Cpyrght All Rights Res
File	8:Ei Compendex(R) 1970-2005/Jan W3	(c) 2005 Elsevier Eng. Info. Inc.
File	34:SciSearch(R) Cited Ref Sci 1990-2005/Jan W5	(c) 2005 Inst for Sci Info
File	35:Dissertation Abs Online 1861-2005/Jan	(c) 2005 ProQuest Info&Learning
File	65:Inside Conferences 1993-2005/Feb W1	(c) 2005 BLDSC all rts. reserv.
File	148:Gale Group Trade & Industry DB 1976-2005/Feb 03	(c)2005 The Gale Group
File	94:JICST-EPlus 1985-2005/Dec W4	(c)2005 Japan Science and Tech Corp(JST)
File	95:TEME-Technology & Management 1989-2005/Jan W1	(c) 2005 FIZ TECHNIK

Set	Items	Description
S1	222128	PLAYER? OR STUDENT? OR COURSE? OR PUPIL? OR TRAINEE OR SCHOOL? ? OR CLASS OR CLASSES OR LEARNER?
S2	811650	TRACK? OR WATCH? OR LOG OR LOGS OR LOGGING OR HISTORY OR HISTORIES OR PREVIOUS()ACTION? ? OR MONITOR?
S3	5431114	MANAGE? OR CONTROL? OR ADMINIST? OR SUPERVIS? OR GUIDE? OR REGULAT? OR GOVERN? OR STEER OR STEERS OR STEERING
S4	171160	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR DB OR - OODB OR DBMS OR RDB OR RDBMS
S5	17469	AI OR ARTIFICIAL()INTELLIGEN? OR NEURAL() (SYSTEM? OR NET OR NETS OR NETWORK?) OR ANS OR (COMPUTER? OR MACHINE?) (N) (LEARN? OR TRAIN?)
S6	1285393	TRANSLAT? OR CONVERT? OR CONVERSION? OR RETRANSLAT? OR REWRIT? OR TRANSITION?
S7	10	S1 AND S2 AND S3 AND S4 AND S5
S8	9238	S1 AND S2 AND S3
S9	895	S6 AND S8
S10	59	S9 AND IC=(G06F-007? OR G06F-013? OR G06F-017?)
S11	13	S10 AND (INTERFACE? OR POLL OR POLLING OR QUEUE? OR SCHEMA-?)
S12	10	S10 AND MC=(T01-J05B4P OR T01-J14 OR T01-J30A OR T01-S03 OR W04-W05A)
S13	28	S12 OR S11 OR S7
S14	12	S10 AND (S4 OR S5)
S15	35	S13 OR S14
S16	35	IDPAT (sorted in duplicate/non-duplicate order)
S17	35	IDPAT (primary/non-duplicate records only)

File 347:JAPIO Nov 1976-2004/Sep(Updated 050204)
(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200508
(c) 2005 Thomson Derwent

17/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

016541605 **Image available**
WPI Acc No: 2004-700325/200469
XRPX Acc No: N04-555395

Learning process analysis method for e.g. school , analyzes learning
processes of several individuals performing same task and identifies
representative learning pathway

Patent Assignee: CORRIGAN G (CORR-I); CORRIGAN J (CORR-I)

Inventor: CORRIGAN G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 2002313850	A1	20030724	AU 2002313850	A	20021204	200469 B

Priority Applications (No Type Date): AU 20029897 A 20020109

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 2002313850	A1		25	G06F-017/60	

Abstract (Basic): AU 2002313850 A1

NOVELTY - A learning process is analyzed to extract decisions made by an individual performing a task, and a sequential list of the decisions is used to create a process map. Learning pathways associated with the process are identified, each pathway comprising a sequential list of pre-requisite decisions. The method is repeated for several individuals performing the same task to identify a representative learning pathway.

DETAILED DESCRIPTION - Learning achievements associated with each pathway are identified, and the representative learning pathway may be used to stimulate individuals subsequently learning performance processes associated with the task. A knowledge **database** is generated by the learning process analysis method.

INDEPENDENT CLAIMS are also included for the following ;

- (1) a learning process analysis system;
- (2) stored software.

USE - For analyzing a learning process in e.g. **school** , university, business environment to e.g. **track** cognitive pathways generated by a **manager** , and to provide a base for **artificial intelligence** .

ADVANTAGE - Limiting the variety of learning pathways taken by individuals may improve the unity of an educational or business environment.

DESCRIPTION OF DRAWING(S) - The drawing shows a flowchart illustrating inter-related learning pathways.

pp; 25 DwgNo 7/9

Title Terms: LEARNING; PROCESS; ANALYSE; METHOD; **SCHOOL** ; ANALYSE;
LEARNING; PROCESS; INDIVIDUAL; PERFORMANCE; TASK; IDENTIFY; REPRESENT;
LEARNING; PATH

Derwent Class: T01; W04

International Patent Class (Main): G06F-017/60

File Segment: EPI

17/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014859505 **Image available**

WPI Acc No: 2002-680211/200273

Ai learning and management method

Patent Assignee: KIM Y M (KIMY-I)

Inventor: KIM Y M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2002036285	A	20020516	KR 200066409	A	20001109	200273 B

Priority Applications (No Type Date): KR 200066409 A 20001109

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 2002036285	A	1	G06N-003/08	

Abstract (Basic): KR 2002036285 A

NOVELTY - An AI (Artificial Intelligence) learning and a management method are provided to perform the AI customized learning and management in the Window environment, to manage statistics by numbering a question DB , and to remove the unnecessary procedure for moving to the desired menu by make a learner select a menu item without a limit condition.

DETAILED DESCRIPTION - The method comprises steps of matching the time by confirming the date of a user system(40) after completing the log -in, outputting a main menu screen consisting of a diagnosis learning, a weekend review, a real examine, a supplement learning, a learning statistics, a learning plan and a learning time and executing the selected menu if the user selects one menu, executing the learning by presenting a preset number of problems according to a grade for the selected subject in the Window environment and storing the result in a learning history database (13) in real time, and integrally managing the learning history stored in the database by each term/learning range.

pp; 1 DwgNo 1/10

Title Terms: LEARNING; MANAGEMENT ; METHOD

Derwent Class: T01

International Patent Class (Main): G06N-003/08

File Segment: EPI

17/5/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

014755164 **Image available**
WPI Acc No: 2002-575868/200262
XRPX Acc No: N02-456554

Tracking of computer-based training courses to monitor progress of
courses using common interface to interface to all players and to
poll routing of messages

Patent Assignee: CBT TECHNOLOGY LTD (CBTT-N); MANGAN M (MANG-I); REDMOND A
(REDM-I)

Inventor: MANGAN M; REDMOND A

Number of Countries: 028 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 200195149	A	20020606	AU 200195149	A	20011129	200262 B
US 20020095401	A1	20020718	US 2001995739	A	20011129	200262
EP 1229470	A2	20020807	EP 2001650143	A	20011123	200262
IE 82408	B3	20020807	IE 20011031	A	20011129	200262

Priority Applications (No Type Date): IE 2000973 A 20001130

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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AU 200195149	A		22	G06F-017/40	
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US 20020095401	A1			G06F-007/00	
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EP 1229470	A2 E			G06F-017/60	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI TR

IE 82408	B3			G06F-013/00	
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Abstract (Basic): AU 200195149 A

NOVELTY - A common interface (21) communicates with all players and routes signals to a chosen translator (22), while a tracking engine (20) manages threads between the translators and the database interfaces (24) by performing queuing to provide effective buffering between the players (4) and the database interfaces. These interfaces are schema access objects and the systems pools the objects to create a number of instances that can be reused for each request.

DETAILED DESCRIPTION - AN INDEPENDENT CLAIM is included for a computer program product with code.

USE - Tracking progress of computer-based training courses.

ADVANTAGE - Efficient and versatile tracking of courses.

DESCRIPTION OF DRAWING(S) - The drawing shows the system

Common interface (21)

Translators (22)

Tracking engine (20)

Database interfaces (24)

Players (4)

pp; 22 DwgNo 2/2

Title Terms: TRACK ; COMPUTER; BASED; TRAINING; COURSE ; MONITOR ;
PROGRESS; COURSE ; COMMON; INTERFACE ; INTERFACE ; PLAY; POLL ; ROUTE
; MESSAGE

Derwent Class: P85; T01; W04

International Patent Class (Main): G06F-007/00 ; G06F-013/00 ;
G06F-017/40 ; G06F-017/60

International Patent Class (Additional): G06F-017/30 ; G09B-019/00

File Segment: EPI; EngPI

17/5/20 (Item 20 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013310634 **Image available**
WPI Acc No: 2000-482571/200042
XRPX Acc No: N00-358815

Design assisting method in knowledge based tutorial system, involves providing dynamic toolbar instantiated from information in database , on display to assist student for achieving goal

Patent Assignee: AC PROPERTIES BV (ACPR-N); ACCENTURE PROPERTIES 2 BV (ACCE-N); INDELIQ INC (INDE-N)

Inventor: BERTRAND B P; NICHOLS M S

Number of Countries: 084 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200038146	A1	20000629	WO 99US2728	A	19990208	200042 B
US 6085184	A	20000704	US 98219088	A	19981222	200042
AU 9925937	A	20000712	AU 9925937	A	19990208	200048
EP 1141917	A1	20011010	EP 99905878	A	19990208	200167
			WO 99US2728	A	19990208	
TW 485286	A	20020501	TW 99122831	A	19991222	200318

Priority Applications (No Type Date): US 98219088 A 19981222

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200038146	A1	E	67	G09B-007/04	
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
US 6085184	A			G06F-015/18	
AU 9925937	A			G09B-007/04	Based on patent WO 200038146
EP 1141917	A1	E		G09B-007/04	Based on patent WO 200038146
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
TW 485286	A			G06F-015/18	

Abstract (Basic): WO 200038146 A1

NOVELTY - Indicia representing goal is received and presented on a display. Credit processing materials are integrated into the presentation to assist achievement of goal. Progress of the **student** towards the goal is **monitored**, to provide feedback to assist **student** in accomplishing goal. Dynamic toolbar instantiated from information in a **database**, is provided on display to assist the **student** for achieving the goal.

DETAILED DESCRIPTION - The dynamic tool bar contains utilizers that are integrated into the presentation. The tool bar contains polymorphic logic that is dynamically instantiated based on the presentation when the toolbar is instantiated. The dynamic tool bar has an interface to perform electronic mail **management**. This interface facilitates telephony function from the presentation. An INDEPENDENT CLAIM is also included for design assistance apparatus.

USE - In tutorial system for assisting the **students** such as in automotive manufacturing facility, medical instruction field and for modeling complex business systems.

ADVANTAGE - Mistakes are noted and remedial educational material are presented dynamically to build the necessary skills that a user requires for success in business endeavor. Utilizes an **artificial intelligence** engine driving individualized and dynamic feedback with synchronized video and graphics used to simulate real world environment and interactions. Multiple correct answers are integrated into the bearing system to allow individualized learning experience.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of design assistance system.

pp; 67 DwgNo 2/30

Title Terms: DESIGN; ASSIST; METHOD; BASED; TUTOR; SYSTEM; DYNAMIC;
INFORMATION; **DATABASE** ; DISPLAY; ASSIST; **STUDENT** ; ACHIEVE; GOAL
Derwent Class: P85; W04
International Patent Class (Main): G06F-015/18; G09B-007/04
File Segment: EPI; EngPI

17/5/22 (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012974961 **Image available**
WPI Acc No: 2000-146810/200013
XRPX Acc No: N00-108714

Work simulation creating method utilizing rule-based expert system for teaching new skills to students

Patent Assignee: AC PROPERTIES BV (ACPR-N); ACCENTURE PROPERTIES 2 BV (ACCE-N)

Inventor: BERTRAND B P; POON A H L; WILLS K R
Number of Countries: 084 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6018731	A	20000125	US 98218726	A	19981222	200013 B
WO 200038138	A1	20000629	WO 99US2656	A	19990208	200036
AU 9925921	A	20000712	AU 9925921	A	19990208	200048
EP 1141915	A1	20011010	EP 99905853	A	19990208	200167
			WO 99US2656	A	19990208	
TW 454129	A	20010911	TW 99122835	A	19991222	200242

Priority Applications (No Type Date): US 98218726 A 19981222

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 6018731	A	140	G06F-017/00	
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WO 200038138	A1 E		G09B-007/04	
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Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU
CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9925921	A		G09B-007/04	Based on patent WO 200038138
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EP 1141915	A1 E		G09B-007/04	Based on patent WO 200038138
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Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
LU MC NL PT SE

TW 454129	A		G06F-015/18	
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Abstract (Basic): US 6018731 A

NOVELTY - The method involves using a work simulation spread sheet for a particular task and accessing it to retrieve indicative goal. The information accessed is analyzed and **translated** into a simulation model. The information in the spread sheet is utilized for managing information flow using table of components. The answers are **monitored** and feedback is given by **artificial intelligence** engine.

DETAILED DESCRIPTION - The information in the spread sheet object component of the rule based expert system is accessed to retrieve information indicative of a goal and the information is utilized to integrate goal-based leasing information in a structural dynamic business simulation designed by a profiling component to motivate accomplishment of the goal into the simulation model. The information flow is **managed** by utilizing a table of components and the answers to questions are **monitored** to evaluate progress towards the goal and provides dynamic, goal-based, remediation learning information feedback from a remediation object component which includes a knowledge system and a software tutor that comprises an **artificial intelligence** engine which generates individualized coaching messages to further motivate accomplishment of the goal. INDEPENDENT CLAIMS are also included for the following:

(a) work simulation apparatus;

(b) computer program that creates work simulation

USE - In education systems and to a rule based tutorial system to **control** business simulation of actual environments to teach new skills to **students** in automotive manufacturing facility, medical **students**.

ADVANTAGE - A business model provides support for realistic activities and allows user to experience real world consequences for

their actions and decisions and entails realtime decision making.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the system.

pp; 140 DwgNo 2/75

Title Terms: WORK; SIMULATE; METHOD; UTILISE; RULE; BASED; SYSTEM; TEACH;
NEW; SKILL; **STUDENT**

Derwent Class: P85; T01

International Patent Class (Main): G06F-015/18; **G06F-017/00** ; G09B-007/04

International Patent Class (Additional): **G06F-017/60**

File Segment: EPI; EngPI

17/5/27 (Item 27 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

008757546 **Image available**
WPI Acc No: 1991-261559/199136
XRPX Acc No: N91-199537

**Hierarchical process control system with multi level architecture -
incorporates artificial intelligence with each level includes
monitor for receiving and monitoring number of input signals**

Patent Assignee: ATLANTIC RICHFIELD CO (ATLF)

Inventor: DORCHAK W A

Number of Countries: 015 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 444801	A	19910904	EP 91301251	A	19910218	199136 B
CA 2036842	A	19910828				199146
US 5161110	A	19921103	US 90485425	A	19900227	199247

Priority Applications (No Type Date): US 90485425 A 19900227

Cited Patents: 1.Jnl.Ref; EP 362386; WO 8903073

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 444801	A			

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
US 5161110 A 9 G06F-015/46

Abstract (Basic): EP 444801 A

The system comprises a **monitor** for receiving and **monitoring** a number of input signals, with the **monitor** producing a first request if at least one input signal exceeds a predetermined range. A guardian unit receives the request and determines the necessary **course** of action to be taken, with the guardian unit producing a second request.

The consultant unit receives the second request and performs an analysis and produces information for aiding the determination of the **course** of action to be taken. The **monitor** produces a third request which is received by the consultant unit which then performs an analysis and produces information for again aiding the determination of the **course** of action to be taken. The **monitor** is coupled to the subject and a number of input signals originating from the subject are received by it. (10pp Dwg.No.3/4)

Title Terms: HIERARCHY; PROCESS; **CONTROL** ; SYSTEM; MULTI; LEVEL;
ARCHITECTURE; INCORPORATE; ARTIFICIAL; INTELLIGENCE; LEVEL; **MONITOR** ;
RECEIVE; **MONITOR** ; NUMBER; INPUT; SIGNAL

Derwent Class: T06

International Patent Class (Main): G06F-015/46

International Patent Class (Additional): G05B-019/40

File Segment: EPI

17/5/35 (Item 35 from file: 347)
DIALOG(R)File 347:JAPIO
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05420068 **Image available**
DISTRIBUTED COOPERATION LEARNING AID METHOD AND SYSTEM

PUB. NO.: 09-034868 [JP 9034868 A]
PUBLISHED: February 07, 1997 (19970207)
INVENTOR(s): HOSOYA KATSUMI
KATO YASUHISA
TSUNODA SUSUMU
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese
Company or Corporation), JP (Japan)
APPL. NO.: 07-178472 [JP 95178472]
FILED: July 14, 1995 (19950714)
INTL CLASS: [6] G06F-017/00 ; G06F-013/00 ; G06T-015/00
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2
(INFORMATION PROCESSING -- Memory Units); 45.9 (INFORMATION
PROCESSING -- Other)

ABSTRACT

PROBLEM TO BE SOLVED: To enhance the effect of cooperating learning with respect to a spatial intelligence by adopting the configuration in which plural pupils use a virtual space simultaneously in common and conversation in voice is conducted.

SOLUTION: Plural terminal equipments 100 are connected by a high speed communication channel 300, a common virtual space is used in common among the plural terminal equipments 100 to conduct mutual conversion in voice. That is, data in a teaching material database 201 and a user information database 202 in a server 200 are transferred to the terminal equipments 100 via the high speed communication channel 300 and stored respectively in a local database 107 and a user position information memory 108. Then a script interpreter 102 interprets information of the local database 107 and transfers the result to a graphic control section 105 and an audio control section 104. The graphic control section 105 displays a projecting diagram to a virtual space onto a monitor 111 according to the information. Furthermore, the audio control section 104 generates an effect sound and a BGM or the like to allow a speaker 110 to sound them.

Set	Items	Description
S1	525805	PLAYER? OR STUDENT? OR COURSE? OR PUPIL? OR TRAINEE OR SCHOOL? ? OR CLASS OR CLASSES OR LEARNER?
S2	486785	TRACK? OR WATCH? OR LOG OR LOGS OR LOGGING OR HISTORY OR HISTORIES OR PREVIOUS()ACTION? ? OR MONITOR?
S3	1325969	MANAGE? OR CONTROL? OR ADMINIST? OR SUPERVIS? OR GUIDE? OR REGULAT? OR GOVERN? OR STEER OR STEERS OR STEERING
S4	196538	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR DB OR OODB OR DBMS OR RDB OR RDBMS
S5	74314	AI OR ARTIFICIAL()INTELLIGEN? OR NEURAL() (SYSTEM? OR NET OR NETS OR NETWORK?) OR ANS OR (COMPUTER? OR MACHINE?) (N) (LEARN? OR TRAIN?)
S6	907749	TRANSLAT? OR CONVERT? OR CONVERSION? OR RETRANSLAT? OR REWRIT? OR TRANSITION?
S7	4	S1 (10N) S2 (10N) S3 (10N) S4 (10N) S5
S8	4967	S1 (10N) S2 (10N) S3
S9	341	S6 (S) S8
S10	46	S9 AND IC=(G06F-007? OR G06F-013? OR G06F-017?)
S11	44	S10 AND (INTERFACE? OR POLL OR POLLING OR QUEUE? OR SCHEMA-?)
S12	47	S12 OR S11 OR S7
S13	24	S10 (S) (S4 OR S5)
S14	48	S12 OR S13
S15	46	S14 AND IC=(G06F-007? OR G06F-013? OR G06F-017?)
S16	30	S15 NOT AD=20001130:20031130
S17	30	S16 NOT AD=20031130:20050210
S18	30	IDPAT (sorted in duplicate/non-duplicate order)
S19	30	IDPAT (primary/non-duplicate records only)

File 348:EUROPEAN PATENTS 1978-2005/Jan W05

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File 349:PCT FULLTEXT 1979-2002/UB=20050203,UT=20050127

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19/3,K/18 (Item 18 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00764257 **Image available**

DATA VISUALISATION SYSTEM AND METHOD

SYSTEME ET PROCEDE DE VISUALISATION DE DONNEES

Patent Applicant/Assignee:

COMPUDIGM INTERNATIONAL LIMITED, Level 16, Compudigm House, 49 Boulcott Street, Wellington, NZ, NZ (Residence), NZ (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200077682 A1 20001221 (WO 0077682)

Application: WO 2000NZ99 20000614 (PCT/WO NZ0000099)

Priority Application: NZ 336257 19990614; NZ 503480 20000320; NZ 504315 20000503; NZ 504589 20000517

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15262

Main International Patent Class: G06F-017/30

International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... displayed by the

invention for a manufacturing process;

Figure 34 is a preferred form database **schema** for representing sports data; Figure 35 shows a preferred form representation generated and displayed by...

...which each may comprise a personal computer or workstation described below. Each client 20 is **interfaced** to the invention 12 as shown in Figure 1. Each client 20 could be connected...

...output device 86 for example a printer. The system 70 could also include a network **interface** card or controller 88 and/or a modem 90. The individual components of the system...the merchant.

Where the merchant provides services for example financial services, the representations could include **schematic** representations of the different areas of services offered by the merchant.

10

The invention is...function of a single central data point 364. The representation may

14

also include a **schematic** view of a venue, for example a sports station or sports field as indicated at...

...point 374, lines 376 radiating from a central point 374 to each site, and a **schematic** representation of the venue indicated at 378.

As shown in Figure 15, the system may...

Claim

... further preferred form of the invention, the data repository is arranged to store a sports **database** of data representing one or more sports events. It is becoming increasingly common to collect...

...scored, the number of tries scored and the number of tries scored which are then **converted**. Other statistics include ball possession representing the proportion of the game during which a particular...

...to spectators in a form which is easily interpreted. Figure 34 illustrates a preferred form **database schema** 900 suitable for maintaining sports data in the data repository 40. The **schema** 900 is shown as a single table in a relational **database**. It will be appreciated that this table could be normalised to an

26

appropriate extent. It will also be appreciated that **schema** 900 could alternatively be represented in an object-oriented form. The **schema** 900 shown in Figure 34 is particularly suitable for storing data representing possession and territory...

...record represents a time slice and may include, for example, a record identifier 902. The **schema** 900 may also include game identifier 904 to uniquely identify the particular sports event represented. The **schema** 900 may also include a possession field 906 which indicates which team is in possession...

...half field 910 representing the half of the game represented by a time slice. The **schema** may also include geographic co-ordinates. The geographic co-ordinates shown in Figure 34 include...the ball to the time the team loses possession. It will be appreciated that the **database schema** 900 could include one or more fields representing the nature of play in a particular time, for example a scrum, maul, charge, line-out, mark, penalty or **conversion**. Furthermore, the magnitude and direction of change in the geographic position of the ball could...kick and chase vs break), total yardage gained in the run, and field position. The **database** could also store data on injuries, development, teams, referees and/or coaches. It will be...

...described above could be applied to a plurality of sports. With appropriate modification of the **database schema**, graphical representation of the sports venue, and the contoured representation, the system could be applied...
...coaching aid, and for live viewing for spectators. Preferred forms of

the invention may perform **player** profiling, **track** game development, pinpoint the circumstances leading to a **player** 's injury, and assist coaches and sports **management** with assessing referee performance.

30

In a further preferred form, the merchant's business could...

Set	Items	Description
S1	2603204	PLAYER? OR STUDENT? OR COURSE? OR PUPIL? OR TRAINEE OR SCH- OOL? ? OR CLASS OR CLASSES OR LEARNER?
S2	2987274	TRACK? OR WATCH? OR LOG OR LOGS OR LOGGING OR HISTORY OR H- ISTORIES OR PREVIOUS()ACTION? ? OR MONITOR?
S3	13197522	MANAGE? OR CONTROL? OR ADMINIST? OR SUPERVIS? OR GUIDE? OR REGULAT? OR GOVERN? OR STEER OR STEERS OR STEERING
S4	937012	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR DB OR - OODB OR DBMS OR RDB OR RDBMS
S5	820489	AI OR ARTIFICIAL()INTELLIGEN? OR NEURAL() (SYSTEM? OR NET OR NETS OR NETWORK?) OR ANS OR (COMPUTER? OR MACHINE?) (N) (LEARN? OR TRAIN?)
S6	4355501	TRANSLAT? OR CONVERT? OR CONVERSION? OR RETRANSLAT? OR REW- RIT? OR TRANSITION?
S7	109	S1 AND S2 AND S3 AND S4 AND S5
S8	4308	S1 AND S2 AND S3 AND S6
S9	212	S8 AND (S4 OR S5)
S10	26450	S1(5N)S2
S11	41	S10 AND (S9 OR S7)
S12	38	RD (unique items)
S13	29	S12 NOT PY>2000
S14	29	S13 NOT PD=20001130:20031130
S15	29	S14 NOT PD=20031130:20050202
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File	94: JICST-EPlus	1985-2005/Dec W4 (c) 2005 Japan Science and Tech Corp(JST)
File	111: TGG Natl. Newspaper Index(SM)	1979-2005/Feb 01 (c) 2005 The Gale Group
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File	434: SciSearch(R) Cited Ref Sci	1974-1989/Dec (c) 1998 Inst for Sci Info
File	34: SciSearch(R) Cited Ref Sci	1990-2005/Jan W5 (c) 2005 Inst for Sci Info
File	99: Wilson Appl. Sci & Tech Abs	1983-2004/Nov (c) 2005 The HW Wilson Co.
File	95: TEME-Technology & Management	1989-2005/Jan W1 (c) 2005 FIZ TECHNIK

15/5/6 (Item 3 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01453011 ORDER NO: AADAA-I9543616

**LEARNING HOW TO SOLVE LINEAR EQUATIONS BY TEACHING THE COMPUTER:
DEVELOPMENT AND FORMATIVE EVALUATION (INTELLIGENT TUTORING SYSTEMS)**

Author: JUN, YOUNGCOOK

Degree: PH.D.

Year: 1995

Corporate Source/Institution: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
(0090)

Advisers: J. RICHARD DENNIS; BERTRAM (CHIP) BRUCE

Source: VOLUME 56/09-A OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 3435. 196 PAGES

Descriptors: EDUCATION, CURRICULUM AND INSTRUCTION ; EDUCATION,
TECHNOLOGY ; EDUCATION, TEACHER TRAINING

Descriptor Codes: 0727; 0710; 0530

Most Intelligent Tutoring Systems (ITS) are designed in such a way that the system's (teacher's) role is active and the **learner**'s role is passive. This study reverses this trend so that **students** function as active **learners** who are **guided** to learn by teaching a computer. For the task of solving linear equations, the study was run on a system that is a hybrid of Computer-Aided Instruction (CAI) and peer tutoring: Linear Kid. In this learning environment, three agents come into play in the peer tutoring stage: the **student**, the **computer learner** and the computer coach. After the **students** watch how the computer system solves a set of tasks, Linear Kid helps the **student** act as a teacher in order to learn more about the subject matter. Linear Kid is designed by employing a term-rewriting system based on a production system architecture. To provide user feedback, the system matches the **student**'s responses with the correct rules of an expert by adopting a simplified version of an overlay model as a **student** model.

The overall framework and an ongoing version of Linear Kid was tested in two sites in a formative evaluation involving two **schools**: (a) **School A**, a public high **school** in a medium-size city and (b) **School B**, a selective public high **school** operated by a major university. The evaluation explored the actual use of the system from the high **school students**' perspectives and pursued the results to enhance future versions of Linear Kid. The methodology includes analysis of interviews, surveys, and analysis of on-line data recorded by the system. Qualitative findings indicate that there are diverse differences among **students** given several dimensions: (a) problem solving, (b) learning contexts, and (c) reactions to the use of Linear Kid. Statistical findings also include the analysis of attitudes toward the use of Linear Kid and group differences emerging from the on-line data. Finally, the study concludes with discussions of a theoretical learning-by-teaching framework and recommendations for how the Linear Kid prototype can adequately be integrated into **student** learning processes.

15/5/10 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5191675 INSPEC Abstract Number: C9604-7110-001

Title: An automatic transcript evaluation system

Author(s): Burke, R.; Bin Cong; Yueming Li

Author Affiliation: South Dakota State Univ., Brookings, SD, USA

Journal: Microcomputer Applications vol.14, no.3 p.123-8

Publisher: ISMM,

Publication Date: 1995 Country of Publication: USA

CODEN: MIAPEZ ISSN: 0820-0750

SICI: 0820-0750(1995)14:3L:123:ATES;1-W

Material Identity Number: F985-96001

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Universities face an important challenge in evaluating the academic transcripts of transfer **students**. Accurate **translation** of a **student**'s academic **history** into the **course** numbering and naming system of the receiving institution is important to the **student**'s degree progress. Often the timeliness and outcome of the evaluation process is also a key determinant of the **student**'s choice of transfer institutions. Unfortunately, the evaluation task is time consuming, requires expert judgement based on a wide knowledge base, is somewhat idiosyncratic to the rater, and may vary across departments. In order to solve some of these problems we developed an intelligent system based on **neural network** models that will learn from an expert evaluator in order to efficiently analyze and **convert** transcripts of transfer **students**. We discuss our models and their performance. (13 Refs)

Subfile: C

Descriptors: backpropagation; educational **administrative** data processing; expert systems; **neural nets**

Identifiers: automatic transcript evaluation system; universities; academic transcript evaluation; transfer **students**; **student** academic **history translation**; numbering system; naming system; receiving institution; **student** degree progress; evaluation timeliness; evaluation outcome; transfer institution choice; expert judgement; knowledge base; intelligent system; **neural network** models; expert evaluator; learning

Class Codes: C7110 (Educational administration); C5290 (Neural computing techniques); C6170K (Knowledge engineering techniques)

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15/5/11 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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03566117 JICST ACCESSION NUMBER: 98A0473864 FILE SEGMENT: JICST-E
**Design and Implementation of Distributed Learning Management System for
CAI by Using Mobile Agents.**

LIU B (1); MIYAJI ISAO (1); SHIINA MASAMITSU (1)

(1) Okayamaridai Sogojoho

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report
(Institute of Electronics, Information and Communication Enginners),
1998, VOL.97,NO.606(ET97 113-129), PAGE.89-96, FIG.9, REF.9

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02:37 681.3:654 681.3:007.51

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: WWW is used by great many user all over the world as a very
useful tool for sharing and exchanging information on network either
anywhere or anyone. It is considered as a huge education media. A
learner can use multimedia teaching materials easily by it either
anywhere or anytime. It is very important how to gather easily and
certainly **learner**'s **history** for establishing a distributed
education system on internet. For the purpose, we use mobile agent. In
this paper, the design and implementation will be discussed for the
distributed education system in information processing education of the
university. (author abst.)

DESCRIPTORS: CAL; CAI; computer network; **artificial intelligence** ; human
interface; distributed processing; data **management** ; data processing;
database ; protocol; LAN; computer system(hardware); internet; agent;
TCP-IP; client server system

BROADER DESCRIPTORS: computer application; utilization; education and
training; communication network; information network; network;
interface; treatment; **management** ; information processing; rule;
system

CLASSIFICATION CODE(S): JE09000G; JC03000K; JE08000Z

15/5/12 (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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01755655 JICST ACCESSION NUMBER: 93A0454853 FILE SEGMENT: JICST-E

The problem of acquiring meta-knowledge from databases .

ARIMURA HIROKI (1); KISHIMOTO TAKUYA (1); TAKEUCHI AKIRA (1); OTSUKI
SETSUKO (1)

(1) Kyushu Inst. of Technology, Computer Science and Systems Engineering
Jinko Chino Gakkai Chiteki Kyoiku Shisutemu Kenkyukai Shiryo(SIG-IES), 1993
, VOL.4th/5th, PAGE.19-24, FIG.3, REF.6

JOURNAL NUMBER: L1424AAG ISSN NO: 0918-5674

UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02:37

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: In this paper, we present an interactive learning environment
(ILE, for short) that supports discovery learning on geographic
databases . The ILE **guides** a **student** through **monitoring student**
's trial-and-error process of free explorations, generating hypotheses
and verifying them. To realize **monitoring** , the ILE uses a
meta-knowledge on inductive learning methods and the technique of
internal experiments. We describe how a bi-directional graphcal
interface realizes these functions. We also discuss the effect of
incorporating a generalization structure into the domain of leaning.
(author abst.)

DESCRIPTORS: CAL; CAI; knowledge base; **database** ; knowledge acquisition;
user interface; **artificial intelligence** ; heuristics

BROADER DESCRIPTORS: computer application; utilization; education and
training; acquisition; interface

CLASSIFICATION CODE(S): JE09000G

'15/5/14 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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2004853 NTIS Accession Number: AD-A322 860/8

Student **Modeling in an Intelligent Tutoring System**

(Master's thesis)

Thompson, J. E.

Air Force Inst. of Tech., Wright-Patterson AFB, OH.

Corp. Source Codes: 000805000; 012200

Report No.: AFIT/GCS/ENG/96D-27

17 Dec 96 113p

Languages: English Document Type: Thesis

Journal Announcement: GRAI9715

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NTIS Prices: PC A07/MF A02

Country of Publication: United States

This thesis explores a new approach to modeling the **student** in an intelligent tutoring system (ITS), by providing a **student** model which learns new solutions from the **student**. A prototype of the new approach to ITS is demonstrated in the Euclidean geometry domain. Complete C++, CLIPS, and Tcl/Tk code listings are included in the appendices for reference. Adaptable multiple software agents were targeted for implementation, based on current literature. However, the **student** model is found to be maintainable without multiple software agents, while still allowing for **tracking** several possible solution paths when **monitoring student** solutions. This capability contradicts previous research reported in the literature. The **student** model is extended by providing a learning module, which is capable of recognizing new solutions provided by the **student**. These new solutions may then be included in the expert knowledge base. In addition to a learning **student** model, other concepts from the current ITS literature are explored and implemented. Differential modeling and expectation driven analysis are analyzed, as well as the use of production rules and overlay models. Mastery levels are implemented to aid in cognitive diagnosis. Several cognitive and pedagogical concepts, such as symbolic knowledge, procedural skill, and conceptual knowledge, are explored and applied to the research. The **student** model prototype is both a pedagogic-content model and a subject-matter model. Additionally, a new division of labor between the **student** model and the instructor module in intelligent tutoring systems is described. Particularly, the **student** model acts strictly as a pedagogic-content model and subject-matter model, with no inferencing other than that expected of the real **student**. The instructor module performs all inferencing about the **student**'s actions and knowledge.

Descriptors: ***Artificial intelligence ; Data bases ; Computer program documentation; Software engineering; Neural nets ; Learning machines ; Theses; Air force training; Military applications; Computer applications; Systems analysis; Man computer interface; Computer aided instruction; C programming language**

Identifiers: C++ programming language; Its(Intelligent tutoring systems); NTISDODXA

Section Headings: 95F (Biomedical Technology and Human Factors Engineering--Bionics and Artificial Intelligence); 62GE (Computers, Control, and Information Theory--General); 74E (Military Sciences--Logistics, Military Facilities, and Supplies)

*15/5/15 (Item 3 from file: 6)
DIALOG(R)File 6:NTIS
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1899337 NTIS Accession Number: N95-30925/8

Making Intelligent Systems Team Players . A Guide to Developing Intelligent Monitoring Systems

Land, S. A. ; Malin, J. T. ; Thronesberry, C. ; Schreckenghost, D. L.
National Aeronautics and Space Administration, Houston, TX. Lyndon B. Johnson Space Center.

Corp. Source Codes: 019042004; ND185000

Report No.: NAS 1.15:104807; NASA-TM-104807

Jul 95 100p

Languages: English

Journal Announcement: GRAI9521; STAR3311

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NTIS Prices: PC A05/MF A02

Country of Publication: United States

This reference **guide** for developers of intelligent **monitoring** systems is based on lessons learned by developers of the DEcision Support SYstem (DESSY), an expert system that **monitors** Space Shuttle telemetry data in real time. DESSY makes inferences about commands, state **transitions**, and simple failures. It performs failure detection rather than in-depth failure diagnostics. A listing of rules from DESSY and cue cards from DESSY subsystems are included to give the development community a better understanding of the selected model system. The G-2 programming tool used in developing DESSY provides an object-oriented, rule-based environment, but many of the principles in use here can be applied to any type of **monitoring** intelligent system. The step-by-step instructions and examples given for each stage of development are in G-2, but can be used with other development tools. This **guide** first defines the authors' concept of real-time **monitoring** systems, then tells prospective developers how to determine system requirements, how to build the system through a combined design/development process, and how to solve problems involved in working with real-time data. It explains the relationships among operational prototyping, software evolution, and the user interface. It also explains methods of testing, verification, and validation. It includes suggestions for preparing reference documentation and training users.

Descriptors: ***Artificial intelligence** ; *Computer systems design; *Expert systems; *Real time operation; *Support systems; *Systems health **monitoring** ; Failure analysis; Human-computer interface; Knowledge bases (**Artificial intelligence**); Manuals; Rules; Software development tools; Space shuttles; Telemetry

Identifiers: NTISNASA

Section Headings: 62GE (Computers, Control, and Information Theory--General)

15/5/22 (Item 10 from file: 6)

DIALOG(R)File 6:NTIS

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0439916 NTIS Accession Number: PB-231 312/0/XAB

Technology for Analysis of Student Interactions with Complex Programs

(Final rept. Jan 72-Feb 73)

Lukas, G. ; Feurzeig, W.

Bolt Beranek and Newman, Inc., Cambridge, Mass.

Corp. Source Codes: 060100

Report No.: BBN-2625

Feb 73 222p

Journal Announcement: GRAI7412

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A10/MF A01

Contract No.: NSF-C708

A computer system to aid in the analysis of **student** programming work is described. The input to this system is a 'dribble file' recording all **student** inputs generated during a **student** computer interaction. The system provides teachers and researchers a set of aids for **monitoring** and analyzing the **student**'s programming activity. The user can design the particular form of analysis he desires. Design and implementation of the analysis system are described. Its standard mode of use is illustrated and special analysis packages are developed. Examples show the application of these various capabilities.

Descriptors: *Individualized **training** ; * **Computer** applications; *Programmed instruction; * **Students** ; *Computer programming; Files(Records) ; Methodology; Information systems; Man machine systems; Interactions; Programming languages; **Data bases** ; Systems analysis; Computer programs; Education

Identifiers: *Dribble files; Man computer interfaces; NTISNSF

Section Headings: 92D (Behavior and Society--Education, Law, and Humanities); 62GE (Computers, Control, and Information Theory--General)

15/5/28 (Item 5 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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04391813 Genuine Article#: TA076 Number of References: 25

Title: **AN ADAPTIVE STUDENT CENTERED CURRICULUM FOR AN INTELLIGENT TRAINING SYSTEM**

Author(s): ELIOT C; WOOLF BP

Corporate Source: UNIV MASSACHUSETTS, DEPT COMP SCI/AMHERST//MA/01003

Journal: USER MODELING AND USER-ADAPTED INTERACTION, 1995, V5, N1, P67-86

ISSN: 0924-1868

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA

Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology & Applied Sciences

Journal Subject Category: COMPUTER SCIENCE, CYBERNETICS

Abstract: An intelligent tutoring system customizes its presentation of knowledge to the individual needs of each **student** based on a model of the **student**. **Student** models are more complex than other user models because the **student** is likely to have misconceptions. We have addressed several difficult issues in reasoning about a **student**'s knowledge and skills within a real-time simulation-based training system. Our conceptual framework enables important aspects of the tutor's reasoning to be based upon simple, comprehensible representations that are the basis for a **Student Centered Curriculum**. We have built a system for teaching cardiac resuscitation techniques in which the decisions about how to teach are separated from the decisions about what to teach. The training context (i.e., choice of topics) is changed based on a tight interaction between **student** modeling techniques and simulation **management**. Although complex **student** models are still required to support detailed reasoning about how to teach, we argue that the decision about what to teach can be adequately supported by qualitatively simpler techniques, such as overlay models. This system was evaluated in formative studies involving medical school faculty and **students**. Construction of the **student** model involves **monitoring student** actions during a simulation and evaluating these actions in comparison with an expert model encoded as a multi-agent plan. The plan recognition techniques used in this system are novel and allow the expert knowledge to be expressed in a form that is natural for domain experts.

Descriptors--Author Keywords: ADAPTIVE ; PLANNING ; PLANNING RECOGNITION ; SIMULATION ; MULTIAGENT ; MULTIMEDIA ; TUTORING ; **ARTIFICIAL INTELLIGENCE** ; KNOWLEDGE REPRESENTATION

Research Fronts: 93-0495 001 (LOGIC PROGRAMS; NONMONOTONIC REASONING; SEMANTICS OF DISJUNCTIVE DEDUCTIVE **DATABASES**)

93-2822 001 (QUALITATIVE DYNAMIC DIAGNOSIS; CONSTRAINT LOGIC PROGRAMMING; KNOWLEDGE REPRESENTATION; **ARTIFICIAL - INTELLIGENCE** IN PERSPECTIVE)

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Set	Items	Description
S1	8265306	PLAYER? OR STUDENT? OR COURSE? OR PUPIL? OR TRAINEE OR SCHOOL? ? OR LEARNER?
S2	154067	S1(3N)(TRACK? OR WATCH? OR LOG OR LOGS OR LOGGING OR HISTORY OR HISTORIES OR PREVIOUS()ACTION? ? OR MONITOR?)
S3	10768	S2(8N)(MANAGE? OR CONTROL? OR ADMINIST? OR SUPERVIS? OR GUIDE? OR REGULAT? OR GOVERN? OR STEER OR STEERS OR STEERING)
S4	2696177	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR DB OR - OODB OR DBMS OR RDB OR RDBMS
S5	266305	AI OR ARTIFICIAL()INTELLIGEN? OR NEURAL() (SYSTEM? OR NET OR NETS OR NETWORK?) OR ANS OR (COMPUTER? OR MACHINE?) (N) (LEARN? OR TRAIN?)
S6	4678654	TRANSLAT? OR CONVERT? OR CONVERSION? OR RETRANSLAT? OR .REW-RIT? OR TRANSITION?
S7	170	S3(10N)S4
S8	3	S7(S)(S5 OR S6)
S9	187	S3(S)S6
S10	13	S9(S)(S4 OR S5)
S11	13	S2(S)S5(S)S6
S12	25	S11 OR S10 OR S8
S13	21	RD (unique items)
S14	15	S13 NOT PY>2000
S15	15	S14 NOT PD=20001130:20031130
S16	15	S15 NOT PD=20031130:20050222
File 275:Gale Group Computer DB(TM) 1983-2005/Feb 04		
(c) 2005 The Gale Group		
File 47:Gale Group Magazine DB(TM) 1959-2005/Feb 03		
(c) 2005 The Gale group		
File 75:TGG Management Contents(R) 86-2005/Jan W4		
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File 636:Gale Group Newsletter DB(TM) 1987-2005/Feb 04		
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File 813:PR Newswire 1987-1999/Apr 30		
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File 15:ABI/Inform(R) 1971-2005/Feb 07		
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File 9:Business & Industry(R) Jul/1994-2005/Feb 03		
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File 810:Business Wire 1986-1999/Feb 28		
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File 647:CMP Computer Fulltext 1988-2005/Jan W4
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File 148:Gale Group Trade & Industry DB 1976-2005/Feb 03
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File 634:San Jose Mercury Jun 1985-2005/Feb 05
 (c) 2005 San Jose Mercury News

16/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2005 The Gale Group. All rts. reserv.

02262202 SUPPLIER NUMBER: 53578815 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Preparing for the Inevitable. (General American Life uses training
courseware, users access mainframe from their desktops) (Company
Operations)**

Martin, John F.

Enterprise Systems Journal, 14, 1, 38(1)

Jan, 1999

ISSN: 1053-6566 LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1698 LINE COUNT: 00143

... of the largest insurance corporations in the United States. To
prepare its staff for the **transition**, General American is using training
courseware that taps directly into a mainframe application from the...

...gearing up to deploy training over its WAN using a central structured
query language (SQL) **database** to **administer** **courses** and **track**
student learning.

General American plans to move as much information as it can from its
legacy...

16/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2005 The Gale Group. All rts. reserv.

02044652 SUPPLIER NUMBER: 19201469

Amdahl spin-off rolls out Web-based training tools. (Pebblesoft Learning
introduces Pebblesoft Learning Delivery System) (Product Announcement)

Brown, Jim

Network World, v14, n9, p42(1)

March 3, 1997

DOCUMENT TYPE: Product Announcement
English RECORD TYPE: Abstract

ISSN: 0887-7661

LANGUAGE:

...ABSTRACT: as well as text. A software agent stores courses and modules
in an Informix Software **database**. A compression utility reduces the
bandwidth needed to transmit audio and video. Another utility **converts**
existing computer-based training applications to enable them to run on the
Internet. The courses are accessed through a Web browser. A **management**
module **tracks course** usage. Pricing is based on the number of students
per server, ranging from \$15,000...

Set	Items	Description
S1	705994	PLAYER? OR STUDENT? OR COURSE? OR PUPIL? OR TRAINEE OR SCH- OOL? ? OR CLASS OR CLASSES OR LEARNER?
S2	100182	TRACK? OR WATCH? OR LOG OR LOGS OR LOGGING OR HISTORY OR H- ISTORIES OR PREVIOUS()ACTION? ? OR MONITOR?
S3	375712	MANAGE? OR CONTROL? OR ADMINIST? OR SUPERVIS? OR GUIDE? OR REGULAT? OR GOVERN? OR STEER OR STEERS OR STEERING
S4	49420	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR DB OR - OODB OR DBMS OR RDB OR RDBMS
S5	3054	AI OR ARTIFICIAL()INTELLIGEN? OR NEURAL() (SYSTEM? OR NET OR NETS OR NETWORK?) OR ANS OR (COMPUTER? OR MACHINE?) (N) (LEARN? OR TRAIN?)
S6	32472	TRANSLAT? OR CONVERT? OR CONVERSION? OR RETRANSLAT? OR REW- RIT? OR TRANSITION?
S7	21	S1 AND S2 AND S3 AND S4 AND S5
S8	26858	S1 AND S2 AND S3
S9	1376	S8 AND S6
S10	15902	S1(3N)S2
S11	341	S9 AND S10
S12	17	S11 AND (POLL OR POLLING OR OBJECT? ? OR INTERFACE? OR QUE- UE? OR BROWSER? OR SCHEMA OR SCHEMAS OR OSA)
S13	38	S12 OR S7
S14	38	RD (unique items)
S15	30	S14 NOT PY>2000
S16	30	S15 NOT PD>20001130
File	1:ERIC 1966-2004/Jul 21	
	(c) format only 2004 The Dialog Corporation	

16/3,K/1

DIALOG(R)File 1:ERIC

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01072788 ERIC NO.: ED448711 CLEARINGHOUSE NO.: IR020474

The Development of an All-in-One Virtual Campus from Ground Zero.

Farmer, Shanan W.; Sobieszcyk, Frank; Farmer, Rachelle

7pp.

October 1999 (19991000)

NOTES: In: WebNet 99 World Conference on the WWW and Internet Proceedings
(Honolulu, Hawaii, October 24-30, 1999); see IR 020 454.

...Department of Defense education and training institutions and organizations that provides mandatory and assignment-specific **courses** for military and civilian personnel serving in 11 acquisition career fields. The DAU virtual campus...

...e., DAU public Web site, registration, enrollment, login, OSS user types, OSS collaboration tools, search, **history**, **logs**, reports, canned e-mail, feedback, help, **courseware interfaces**, test application, and database **interfaces**. The first section of the paper discusses why DAU is **transitioning** to the OSS. The second section summarizes the purpose of the OSS, including the following components: **student** registration, **course** enrollment, test delivery, **course** evaluation, **student tracking**, report generation, problem resolution, and site collaboration. The third section describes DAU's approach to developing **courseware**, including considerations related to **learner** interactions, testing and evaluation, and **student** -faculty interactions. The third section addresses defining the **course** structure, including test questions, deciding which OSS tools to integrate, and populating OSS tools. (MES)

DESCRIPTORS: *Computer System Design; *Computer Uses in Education; **Courseware** ; *Distance Education; Educational **Administration** ; Educational Technology; Higher Education; Material Development; *Systems Development; World Wide Web

IDENTIFIERS: **Course** Development; Department of Defense; Technology Integration; Technology Utilization; *Virtual Universities; *Web Based Instruction

16/3,K/27

DIALOG(R)File 1:ERIC

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00611488 ERIC NO.: ED267732 CLEARINGHOUSE NO.: IR012002

GUIDON- **WATCH** : A Graphic Interface for Viewing a Knowledge-Based System.
Technical Report #14.

Richer, Mark H.; Clancey, William J.;

CORP. SOURCE: Stanford Univ., CA. Dept. of Computer Science. (BBB04712)
46pp.

August 1985 (19850800)

NOTES: For a related document, see ED 242 311.

SPONSORING AGENCY: Office of Naval Research, Arlington, VA. Personnel and
Training Research Programs Office. (BBB02805)

GUIDON- **WATCH** : A Graphic Interface for Viewing a Knowledge-Based System.
Technical Report #14.

This paper describes GUIDON- **WATCH** , a graphic interface that uses
multiple windows and a mouse to allow a **student** to browse a knowledge
base and view reasoning processes during diagnostic problem solving. The
GUIDON...

...based systems can provide the basis for teaching programs, and this
paper specifically addresses GUIDON- **WATCH** as an interface to NEOMYCIN, a
medical consultation system. Methods are presented for providing multiple
...

...from domain knowledge. A number of issues in software design are also
considered, including automatic **management** of a multiple-window display.
(Author/THC)

DESCRIPTORS: ***Artificial Intelligence** ; *Clinical Diagnosis; *Computer
Assisted Instruction; *Computer Graphics; **Courseware** ; **Databases** ;
Higher Education; Man Machine Systems; Medical Education; *Problem
Solving; Program Descriptions; Teaching Methods